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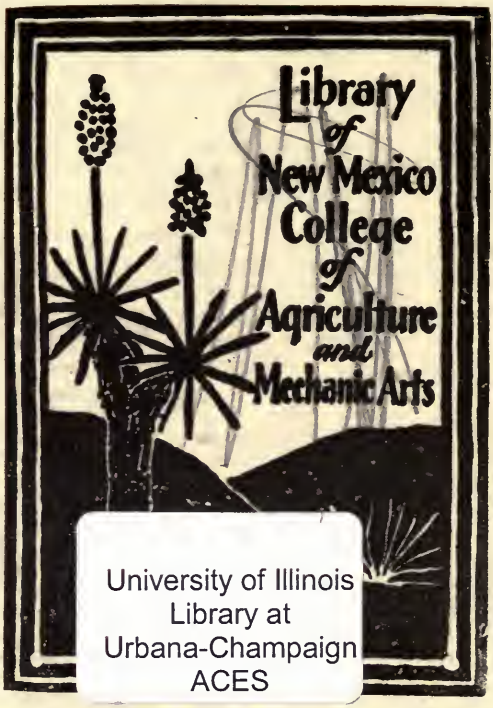

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BULLETIN NO. 129

MARKET CLASSES AND GRADES OF SHEEP

By W. C. COFFEY

URBANA, ILLINOIS, NOVEMBER, 1908

Summary of Bulletin 129

1. The market classes of sheep are Mutton, Feeder and Breeding sheep. The name of a class indicates the use to which sheep in that class are put.

2. Each class is divided into sub-classes and these again into grades. In general the names of the sub-classes suggest differences of either age or sex between sheep put to the same use. The grades refer to differences between the best and the less desirable animals in the various sub-classes. In the mutton class these differences are based on quality, condition, weight and form; in the feeder class, on quality, form, constitution, condition and weight; and in the breeding class, on age, constitution, form, breeding, quality and condition.

3. Mutton Sheep.—The mutton class includes both native and western sheep. The sub-classes are lambs, yearlings, wethers, ewes, bucks and stags. Page 579.

Lambs.—About eighty percent of the sheep sent to slaughter are lambs. The grades are prime, choice, good, medium, and common or culls. Quality, condition, form, and weight are the factors considered in determining the grade to which lambs belong. Both quality and condition are very important and lambs without high development in both are not placed in the higher grades. Form, especially the feature of paunchiness, is significant in grading lambs. Weight is a factor that varies somewhat with the different times in the year, but lambs weighing 80 pounds and prime in quality, condition and form will always grade as prime. Page 580.

Yearlings.—Yearlings are used as a substitute for lambs in the meat trade. The grades are prime, choice, good. Prime yearlings are light in weight, immature, and very highly developed in quality and condition. Page 594.

Wethers.—Only a small percentage of the sheep sent to market are wethers. This percentage is small because both growers and consumers prefer lambs to older sheep. The grades are prime, choice, good, common. Prime wethers have the same requirements in quality and condition as prime yearlings. They may be either light, weighing from 95 to 110 pounds, or heavy, weighing 140 pounds or more. Page 598.

Ewes.—Ewes do not sell on a par with wethers because they have proportionately a greater amount of offal and a smaller amount of lean meat. The grades are prime, choice, good, medium

and common or culls. The requirements in condition, quality and weight are practically the same as for wethers. Page 604.

Bucks and Stags.—Choice bucks are fat and resemble wethers in form and quality. Page 607.

4. Feeder Sheep.—Feeder sheep are almost exclusively western sheep. The sub-classes are lambs, yearlings, wethers and ewes. Page 609.

Lambs.—The grades are fancy selected, choice, good, medium, common. Choice feeder lambs show thrifty condition, a high degree of quality and weigh between 55 and 62 pounds. Page 609.

Yearlings.—The grades are choice, good, common. The choice feeder yearling must be of good form, highly developed in quality and light in weight. Page 615.

Wethers.—The grades are choice, good, medium, common. In general the requirements are the same as for yearlings. Page 619.

Ewes.—The grades are choice, good, medium, and common. Choice feeder ewes are young and choice in quality. Page 624.

5. Breeding Sheep.—The sub-classes are bucks and ewes. Page 627.

Ewes.—Breeding ewes are selected from both native and western offerings. The grades are fancy selected, choice, good, common. Choice breeding ewes are from two to four years old, sound, well formed and well bred. Page 627.

Bucks.—Breeding bucks are not sub-divided into grades. All offerings are natives. Page 630.

OUTLINE

Classes	Sub-classes	Grades
MUTTON SHEEP (Native and Western Sheep)	Lambs	Prime, Choice, Good, Medium, Common or Culls
	Yearlings	Prime, Choice, Good
	Wethers	Prime, Choice, Good, Common
	Ewes	Prime, Choice, Good, Medium, Common or Culls
FEEDER SHEEP (Western Sheep)	Bucks and Stags	Choice, Good, Common
	Lambs	Fancy Selected, Choice, Good, Medium, Common
	Yearlings	Choice, Good, Common
	Wethers	Choice, Good, Medium, Common
	Ewes	Choice, Good, Medium, Common
BREEDING SHEEP (Native and Western Sheep)	Ewes	Fancy Selected, Choice, Good, Common
	Bucks	(Not graded)
MISCELLANEOUS		
Hot House Lambs		
Export Sheep		
Throw-outs		
Dead Sheep		
Goats		

MARKET CLASSES AND GRADES OF SHEEP

By W. C. COFFEY, First Assistant in Sheep Husbandry

INTRODUCTION

The purpose of this bulletin is to define and illustrate the various classes and grades of sheep as recognized on the Chicago and other large markets. It is presented with the hope that it will be of value to those engaged in growing and handling sheep. The grower or feeder offering sheep for sale often forms a very imperfect estimate of their market value, and chiefly because his contact with the open market has not been sufficient to familiarize him with the factors embodied by the various terms in market reports. It may be that he is ignorant of the meaning of certain terms; he may have a mistaken or hazy notion of others, and both observation and experience show that anything short of a fairly accurate conception of what a certain market term stands for is a source of disappointment and annoyance. Because his judgment as to the true market worth of his sheep is uncertain, the owner may suffer a financial loss in dealing with a local buyer by selling under the market value or by missing a sale by asking too much for them. If, at the time of sale, the owner could definitely determine the value of his sheep, he would experience less difficulty in coming to an early understanding with the local buyer, or in case he shipped them direct to the open market, the chances for disappointment and dissatisfaction would be greatly reduced. While it is the privilege of a few to visit the markets often and there learn the requirements and the demands for the different grades in the various classes, the great majority of sheep owners, and many feeders, must depend largely upon the market reports for such information, and the value of these reports to the man who proposes to buy or sell sheep is determined by the extent to which he can apply them to his particular purchase or sale. It is hoped that the descriptions and illustrations herein presented will give the sheep owner an understanding of the market classes and grades of sheep so that the market reports will not be misapplied by him. It is also hoped that it will have the further influence of leading men to adopt methods of breeding and feeding whereby they will be able to produce animals that will meet with strong demand upon the markets.

The task undertaken is not without its difficult phases. The grades in the different classes are more or less variable because of variations in quality, condition, and weight, the apparent supply

of sheep and the activity of the mutton trade. It is exceedingly difficult to describe accurately animals typical of the various grades. Photographs are hard to secure because sheep are yarded in covered pens where the nature of the light defeats the most skillful photographer. While photographs are helpful in fixing the different grades in the mind of the reader it is impossible to present a photograph that is universally typical of a particular grade, because of variations in the markings and wool of sheep coming in that grade. Then, too, photographs of sheep often do not have a descriptive effect or the effect of corroborating a description satisfactorily, for the reason that the wool conceals, in a large measure, the condition and many times the form of the animal. In cases where the difference between two adjoining grades in the same class is due to condition alone, photographs are of very little aid in showing this difference.

Another difficulty arises from the variation which exists in the use of terms by those engaged in buying, selling and reporting sheep on the market. For example, such words as choice and prime are frequently used interchangeably by the same party, or different parties use unlike terms with reference to the same thing.

In submitting the classification given in the following pages, an effort has been made to present the subject true to existing conditions, and in such a way that the average reader will understand it. The writer does not wish the foregoing statements to impress the reader with the idea that the classification which follows is other than that actually in use. While it is often imperfectly and loosely quoted, and greatly abridged by buyers and salesmen in everyday practice, it is none the less the true classification.

This bulletin is the result of a personal investigation of the subject at the Union Stock Yards, Chicago, where every possible courtesy was extended by the officials of the Union Stock Yards and Transit Company, live stock commission companies, packers, Government inspectors, and by representatives of the live stock journals. The greater number of the photographs from which the engravings were made were taken in the Chicago Union Stock Yards especially for use in this work.

NATIVE AND WESTERN SHEEP

Native sheep are those produced—ordinarily in small flocks—on the farms of the central, southern and eastern states. Western sheep are those produced—usually in large bands—on the ranges of the western states. As a rule western sheep have enough Merino

blood to make them markedly different in appearance from natives which are mostly from mutton-bred parents. But even were they identical in breeding, buyers and salesmen on the market could easily distinguish between them because of differences resulting from the way in which they are fed and managed. On markets where both native and western sheep are received, the daily reports nearly always distinguish between them, but in this bulletin no attempt is made to classify them separately where they are both put to the same use. Hence both native and western sheep are placed in the mutton and in the breeding classes, but only western sheep are placed in the feeder class. While thin natives are often bought up in the country and successfully fed, those that reach the market in low condition do not sell as feeders because they are usually infested with internal parasites, thus making it difficult and in many instances impossible to fatten them.

Upon our larger markets and in daily live stock reports, western sheep and lambs are not infrequently distinguished by the name of the state in which they were supposed to have been produced or fed, as Montanas, Colorados, Mexicans, Idahoes, etc. No attempt has been made, in this bulletin, to attach importance to such terms because the differences between sheep from different western states are many times almost imperceptible and those differences are due to condition, quality, and breeding which must inevitably vary somewhat within a state.

In this connection may be mentioned another very common practice which is to prefix the word "fed" before a certain class and grade to distinguish grain from grass-fattened sheep. The term is used for a short time in the autumn and in the spring when both grain and grass-fattened sheep are coming to market, and it signifies so little that it is not given recognition in the outline of this work.

MUTTON SHEEP

All sheep and lambs sent to market for slaughter, no matter what the condition, age, or weight, are classed as mutton sheep.

Of the various sub-classes, the one known as *lambs* is by far the most important, due to the fact that the producer can most profitably market his sheep as lambs and also that lamb is preferred to mutton by the consumer. However, mature mutton sheep will always be a feature on the market because it is the channel of disposal for surplus and spent breeding stock.

Mutton sheep upon the Chicago market are either slaughtered at the Chicago packing houses or reshipped, principally to Phila-

delphia, New York, Baltimore, Washington and Buffalo. These live shipments are usually made up of choice grades. The sheep slaughtered in Chicago are disposed of locally and by shipments to other consuming centers. The following sub-classes mark the divisions under which mutton sheep are graded: LAMBS, YEARLINGS, WETHERS, EWES, BUCKS and STAGS.

LAMBS

It is estimated by traders upon the Chicago market that at least eighty percent of the sheep received at that place are lambs. This observation in part confirms the current statement that mutton production has become very largely a lamb proposition. As stated in the discussion under Mutton Sheep, both the producer and the consumer prefer lambs to older sheep. They are preferred by the producer because they make cheaper gains than sheep, and by the consumer because they are more palatable and more convenient to use.

At from twelve to fourteen months of age lambs pass into the yearling and ewe classes. But it is the degree of maturity the young animal has attained rather than a set, definite age which determines whether or not it belongs to the lamb class. Native lambs usually reach maturity at an earlier age than western lambs because they receive a greater abundance of feed, and they are generally free from Merino blood. Let it be understood that the above statement is no disparagement to Merino blood. On the other hand it is not difficult to see that the slower approach to maturity, which holds an animal in the lamb class for a longer time, may prove a decided advantage. For example, a feeder may buy light western lambs in October or November and feed them until the following May, at which time they will still be classed as lambs, while native lambs of the same age and similarly treated would be regarded as sheep. Because the term *lamb* applies to a comparatively long period in the life of the animal, there comes a time in the year when for several weeks it is necessary to make two separate quotations on lambs, one of which is designated as *spring lambs* to distinguish lambs that are born in the year the quotations are made, from those that were born the year previous. These separate quotations first appear about May 20, and continue until July 1. After the latter date all offerings born in the spring of the previous year are known as yearlings or ewes.

The most important factors in determining the grade to which lambs belong are form, quality, condition and weight, and the grades recognized on the market are: PRIME, CHOICE, GOOD, MEDIUM, COMMON or CULLS.

PRIME LAMBS

It is understood that when lambs are graded as prime they are the very best of the class that may be generally expected on the market. Prime lambs are taken largely for fancy city market, hotel and restaurant trade. Such lambs are practically above criticism in quality, condition and weight. They are usually secured by sorting the best out of a band. This is especially true of native lambs where the offerings in one shipment are likely to be very uneven.

Before a lamb is graded as prime it is determined by sight and touch that it possesses the form, quality, condition and weight demanded by the dealer in high-class mutton.

FORM.—The butcher demands the form that shows the most development in the loin, back, and leg of mutton. He demands development in these regions because they are the parts from which the high-priced cuts are secured. The animal should show a great deal of depth and breadth and no tendency to be paunchy, because paunchiness adds to the percentage of waste in slaughtering. The prime lamb should present a general fullness and smoothness of outline, both of which indicate thickness and evenness of flesh. There should be an absence of roughness because the waste in the dressing of the rough, ungainly lamb is large in proportion to the carcass, and furthermore, the appearance of the carcass of such a lamb fails in attractiveness when placed on exhibition in the market. It is generally conceded that form is enhanced if the body is supported by short legs. However, many prime lambs have only moderately short legs. Very long legs detract from the dressed yield and from the appearance of the carcass. when displayed, and on this account lambs that are decidedly upstanding do not grade as prime.

QUALITY AND CONDITION.—(1) General Quality.—The degree of development in this characteristic is one of the most important in determining the value of fat lambs. General quality is indicated by a medium sized, clean cut head, ears of fine texture, and fine, but strong bone, a light pelt, and full, well-rounded outlines. All these suggest a freedom from that coarseness which adds to the waste in dressing, and the unattractiveness which works against the value of the carcass. Of the items of general quality enumerated, lightness of pelt is the most essential. By pelt is meant the skin and wool combined. To secure a pelt of light weight, the skin should be comparatively thin and free from folds or wrinkles, and the wool should not be very dense or oily. The only time when the heavier weight of pelt seems to be favored is in the spring when both shorn and unshorn sheep and lambs are being marketed.

During these months the difference in price between shorn and unshorn lambs varies from $.75 to $1.25 per hundred weight in favor of the unshorn lambs. The amount of difference depends on the condition of the wool market and the time in the season when the lambs are slaughtered. The difference usually becomes less as the hot weather approaches, because it is claimed the carcasses of unshorn lambs deteriorate in quality on account of the discomfort the lambs suffer in hot weather from being left in their fleeces. Let it be remembered that the discrimination in favor of the heavier pelt holds only in cases where shorn and unshorn sheep or lambs are compared. Of two lambs in the wool, the one with the lighter pelt is always preferred provided they are otherwise equal. The question is often asked why sheep or lambs with heavy pelts are discriminated against when they carry a greater weight of wool than those with light pelts. This question arises naturally because wool is worth a great deal more per pound than mutton and it would seem that lambs with heavy fleeces should be credited with the greater amount of wool they produce. In a large packing plant the slaughtering department usually delivers pelts having wool at about the same stage of growth to the wool pullery department at a uniform price. Hence the department buying the lambs does not discriminate in favor of those having heavy fleeces. If the buyer for the packer were required to base his bids upon the wool as well as the mutton yields, his task would be greatly complicated because in estimating the yield of wool he would be obliged to determine how much of the pelt is wool and how much of it is skin. Hence the packer instructs the buyer to be governed chiefly by the percentage of marketable meat the lamb will yield and not by the combined product of mutton and wool.

The weight of pelt may be appreciably influenced by the condition of the wool, with reference to foreign material and moisture in it. Should lambs be very wet, buyers may refuse to bid on them until they become more nearly dry, and if bids are made on offerings whose wool contains an unusual percentage of moisture, the buyer attempts to allow for it by the price he offers. Foreign material such as mud, sand, or dung, may be lodged in the wool, and the buyer protects himself from loss upon such offerings by bidding less per pound for them than if they were clean. Such bids usually work against the owner, and hence it pays to market lambs in clean condition. Occasionally the general quality of lambs may be developed to such a marked degree that they will sell as prime even though they be somewhat deficient in form. A notable example is the fat Mexican lamb. From the standpoint of form the Mexicans are not especially attractive, since they are upstanding

and have narrow bodies and long necks, but they are unequaled in the fineness of their features and their lightness of pelt. Without their high development of general quality they would not receive favorable consideration from buyers, but because of it, when fat, they top the market.

(2) Quality of Flesh and Condition.—The terms quality and condition are frequently used interchangeably on the market, and chiefly because the quality of flesh is largely dependent upon condition. By condition is meant the degree of fatness of a lamb. The reasons why a lamb should be fat are: (a) Other things being equal, there will not be as high a percentage of offal as in the half fat, or the thin lamb; (b) the fat adds to the attractiveness of the carcass, and thus makes it more inviting to the purchaser; (c) the comparatively fat carcass loses less in weight in the process of "cooling out" in the refrigerator and also in cooking; (d) some fat on the outside of the lean meat and a considerable amount deposited through it adds to its palatability by making it more juicy and of better flavor.

Desirable quality of flesh is indicated by firmness along the back, at the loins, over the sides and at the leg of mutton. "Hard as a board" is a favorite phrase with many sheepmen to describe a back having desirable quality of flesh, but with this single idea in mind bareness or lack of flesh might be mistaken for firmness of flesh. While the flesh should have that firmness which would impress an inexperienced man as being hard, it should have just enough springiness to yield slightly to the touch.

It is rarely that lambs are made too fat for the prime grade but very often they fail to grade as prime because they are not fat enough. Because lambs are finished for market before they have ceased growing, they do not have the tendency to lay on fat in large, soft bunches at the rump and in rolls at the girth, and hence it is difficult to carry them to the point of excessive fatness. The development of fat essential to the prime lamb is indicated by a thick dock, a full, mellow purse, thickness and smoothness on the back and over the ribs, fullness at the neck and flanks, and a plump, well filled breast.

It is impossible to tell with exactness, by merely looking at it, the condition of a lamb in the wool and hence it is necessary to judge condition by placing the hands on the animal. Experts rely upon placing the hand but once, for example, by spreading the hand so that the back and ribs will be touched by one stroke, or by grasping the loin, or by getting the thickness and fullness of the dock, but none risk their judgment upon sight alone. A great deal is

determined by the stroke that touches the back and ribs because it not only reveals the condition as evidenced by the degree of smoothness present, but also the amount and quality of the flesh by the thickness and firmness of it. This stroke also aids in determining the kind of pelt a lamb may have with respect to thickness of skin, density of wool and foreign material in it.

PLATE I.—A PRIME LAMB.

WEIGHT.—Weight is a factor that varies somewhat with the different seasons in the year, but in general, the lamb of prime quality and condition and weighing 80 pounds sells at the highest price. When spring lambs first appear on the market they weigh little more than 60 pounds, but if they have the quality and finish they easily command top prices. During the summer months consumers of mutton desire small cuts because they do not eat large quantities of meat in warm weather, and this gives rise to a strong demand for lambs ranging in weight from 65 to 70 pounds. There never is a time, however, when lambs weighing 80 pounds will not sell as prime provided they are prime in form, quality, and condition. Occasionally native lambs showing the best form, quality, and condition will sell as prime lambs, even though they reach 100 pounds in weight. Such cases are exceptional, and no one could expect to market lambs of this weight regularly and always have them grade as prime. However, a departure of a few pounds from the weight that is most popular does not detract as much from the price received as does an equal departure from the most

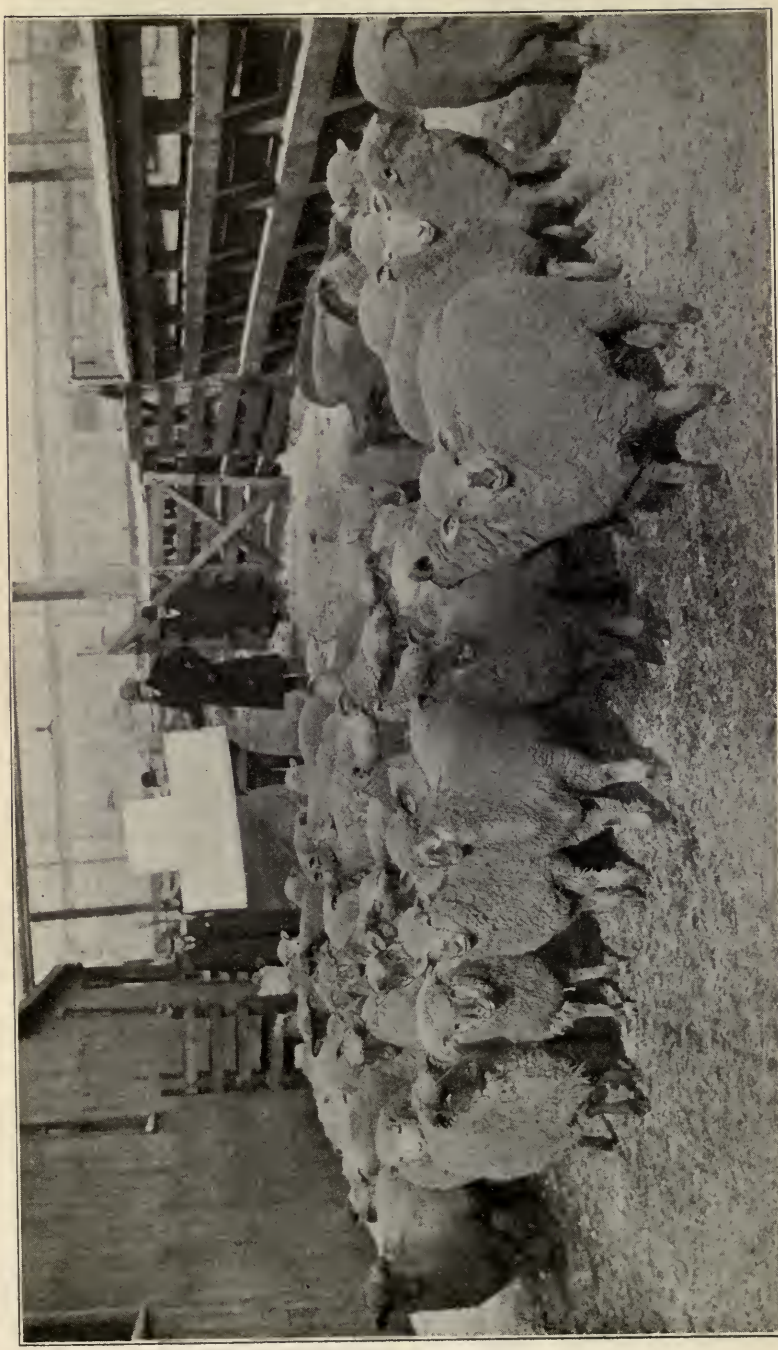

PLATE 2.—PRIME LAMBS.

desirable quality and condition. Quality and condition are of direct interest to the packer in that they influence the percentage of marketable meat secured, but weight is a factor regulated almost entirely by the consumer. It is claimed that in the combination of tenderness, juciness and flavor, the flesh from the lighter lamb is not superior to that of the heavier lamb. But in making selections from the lighter carcass the average consumer feels more fully assured he is getting lamb and not mutton, and the size of the cuts from the smaller carcass is more convenient for his use.

What has been said in the above discussion about the form, quality, and condition of the prime lamb is in the main true of any sub-class of mutton sheep. Any animal that is markedly deficient in either form, quality, or condition will not meet the demands of the dealer in high-class mutton, and hence, cannot grade as prime. See Plates 1 and 2.

CHOICE LAMBS

This is the grade that includes by far the greater number of the better offerings upon the Chicago market. To grade as choice, lambs cannot fall below the requirements for prime lambs to any marked degree. They must have the form, quality, and condition that make them desirable as mutton of a high class. They usually fail to sell as prime lambs because they are not quite up to the standard in quality, condition, or weight. While lambs frequently fail to grade higher than choice because of their quality or their weight, a lack in condition is most often the retarding factor. This may be traceable to one or more of the following causes. A long shipment from the range may cause deterioration in condition to such an extent that lambs, considered strictly prime before shipment, do not grade better than choice. Men who are keeping lambs as a feeding proposition are often influenced to market them short of prime finish because of unfavorable conditions, as shortage of feed, the high prices ruling for feeds, or inadequate shelter in seasons of unusual rainfall. Men who handle only a few sheep, and men who have newly taken up the practice of feeding are often unable to judge condition, and as a result, market their offerings underfinished. And, finally, men may know that their lambs are not in the most desirable condition yet they may feel that the probability of a decline in market prices for lambs is too great to warrant holding them until they are finished. See plates 3, 4 and 5.

PLATE 3.—CHOICE NATIVE LAMBS. THESE LAMBS ARE SLIGHTLY DEFICIENT IN QUALITY AND CONDITION AND THEY ARE TOO HEAVY TO GRADE AS PRIME.

PLATE 4.—CHOICE WESTERN LAMBS.

PLATE 5.—CHOICE SPRING LAMBS. THESE FIRST APPEAR ON THE CHICAGO MARKET IN NOTICEABLE NUMBERS ABOUT MAY 20. THE FIRST OFFERINGS ARE USUALLY FROM KENTUCKY AND TENNESSEE.

GOOD LAMBS

Upon the market, buyers and salesmen often prefer to speak of a band of lambs as being "good to choice" rather than using either of the terms separately to describe them. This doubtless is partly due to the unevenness in bands of lambs, which suggests two grades rather than one. If there is a pronounced unevenness in an offering, that alone is sufficient to prevent them grading better than good. But the individual lamb must be noticeably deficient in form, quality, condition or weight, or slightly deficient in each, thus making a lower grade through a combination of deficiencies. In discussing the choice grade it was pointed out that condition is the factor in which most lambs in that grade fall short of prime, but in the grade under consideration a lack of quality is almost as frequently apparent as lack of condition. No matter how much fat they may have, lambs having heavy pelts, as evidenced by folds or wrinkles over the body, rarely grade higher than good. Very coarse native lambs, especially ram lambs, may be in choice condition but out of consideration in that grade through lack of quality. See plate 6.

PLATE 6.—GOOD LAMBS. NOTE THE FAULTY FORM AND ESPECIALLY THE UNDERFINISHED CONDITION.

MEDIUM LAMBS

Lambs of this grade do not have, by a great deal, the condition and quality necessary in the prime lamb. It is in this grade more than any discussed above that faulty form is apparent. Long, loosely coupled bodies, with little spring of rib, and rough outlines

PLATE 7.—MEDIUM NATIVE LAMBS. THESE LAMBS ARE PAUNCHY, LOOSELY COUPLED, AND VERY DEFICIENT IN CONDITION.

are frequently seen. Because they are coarse, underfinished, and often paunchy, they do not dress a high percentage, and what they do produce is without sufficient fat to meet favor with dealers who handle high class mutton. Only the coarser, heavier pelted western lambs are found in this grade, as the smoother, tidier range lambs in underfinished condition are sold to go to the country as feeders. Many native lambs, however, come in this grade, because those appearing on the market in low condition or those on the coarse "bucky" order are not sought as feeders. See plates 7 and 8.

PLATE 8.—MEDIUM WESTERN LAMBS. LEGGY AND HEAVY IN PELT AS EVIDENCED BY FOLDS AND WRINKLES ON THEIR NECKS AND BODIES.

COMMON OR CULL LAMBS

Lambs are in this grade chiefly because they are very far below that condition of flesh that would make them desirable for mutton. Coarse, ill-shaped lambs commonly belong to this grade, but not unless they are noticeably lacking in quality of flesh and amount of fat. Offerings in this grade are very light in weight, the range, with the one exception, as noted below, being from 30 to 50 pounds. Occasionally very young native lambs reach the market that have enough quality and condition to place them in a higher grade, but because of their very light weight and tender age they must sell as common lambs. As stated previously, practically all native lambs appearing on the market go to slaughter, while the

PLATE 9.—COMMON OR CULL LAMBS. NOTE THE UNTHRIFTY APPEARANCE AND LACK OF SIZE.

thinner western lambs are sent to the country as feeders, hence natives form the bulk of common or cull lambs. Under present methods of sheep husbandry, it is impossible to send all native lambs to market in desirable condition because growers of natives have not yet learned how to keep them free from infestation by internal parasites, and when they are infested to any great extent, they do not take on fat.

In both the common and medium grades are frequently seen what are known as coarse, "bucky," native lambs. These are the result of careless shepherding on the part of growers. If lambs are left entire they rapidly become coarse when their sex instinct develops, and because of this coarseness and the loss of fat resulting from a great amount of fretful activity, they are undesirable as mutton. While it is not the purpose to discuss any question of shepherding in this connection, it may be said in passing that growers of natives would save much to themselves annually if they would make it a practice to castrate their ram lambs a few days after they are born. These coarse, "bucky" lambs are heavier than the bulk of common lambs, as they sometimes weigh as much as 100 pounds.

The term, "cull," is common parlance in sheep market circles, but it has a double meaning. One applies to the lowest grade under a given class, and it is in this sense that the writer uses the

term; the other, to the number a buyer may have the privilege to reject when purchasing a band of lambs or sheep at a given price. Therefore, in defining the lowest grade of lambs, the term "common," is less confusing than the term, "cull." See plate 9.

YEARLINGS

Yearlings are used as a substitute for lambs in the meat trade. The ability of the animal to substitute in this way depends upon its weight, quality, condition, and immaturity. An index greatly depended upon for identifying the carcass of a young sheep, or lamb, is what is known as the "break joint," which is found immediately above the pastern joint. The leg easily severs at the "break joint," leaving a reddish, porous, indented surface over which there is a slight, viscid like secretion easily noticeable to the touch. The presence of this joint in the live animal is best determined by feeling just above the pastern joint for a bony-like prominence, which is a true indication of it. It disappears when the sheep becomes mature, and a sheep that does not have it cannot class as a yearling. The yearling class is composed exclusively of wethers because the "break joint" disappears in ewes at about the time they pass out of the lamb class. Lambs born the year previous to the time they appear on the market pass out of the lamb class about July first, and from that time the wethers are called yearlings until they are too far toward maturity to "break" as the salesmen and buyers familiarly refer to the "break joint."

Yearlings are commonly designated upon the market as "lights" and "heavies." These terms, as they would indicate, refer to weights. Thus we frequently hear the phrases "prime lights" and "prime heavies," by which is meant the quality and condition of animals coming within certain limits of weight rather than their desirability as mutton. And hence, it is felt that "lights" and "heavies" are not strictly logical terms upon which to base gradations in this class.

Since yearlings are used to take the place of lambs, the nearer they approach the quality, condition, and weight of prime lambs, the more satisfactorily will they accomplish the purpose for which they are intended. Any great departure in any of the above characteristics as applied to prime lambs will seriously affect the desirability of yearlings and if they are low in condition they are practically out of consideration as such. Therefore, the basis upon which yearlings are given a place, surrounds them with so many requirements that it is impossible for them to be included under many different grades.

PLATE 10.—PRIME YEARLINGS.

In marketing sheep, the tendency to market young animals is becoming more and more prevalent, and some interest attaches to the effect of this tendency upon the number of yearlings coming to market now in comparison with past years. So far as we are able to judge, there is proportionately no abatement in the number and many believe it has increased. It would seem, then, that there are a number of lambs each year that for one or several reasons should not be marketed as lambs and hence a logical place is made for yearlings.

The grades are: PRIME, CHOICE, GOOD.

PRIME YEARLINGS

Yearlings, to grade as prime, must be highly developed in form, quality, and condition, and of a light, handy weight, which ranges from 70 to 90 pounds. The form of the prime yearling embodies symmetry, compactness, roundness, and smoothness with no suggestion of uneven lines or prominent parts. Unless such a form is secured, the carcass will appear too great in size to look like a lamb. In general quality the requirements are fine, clean cut features, and a pelt of light weight. As with prime lambs, so with yearlings, a high dressed percentage is demanded, and this is not possible with the animal having very coarse features and a heavy pelt.

The most important considerations in placing a yearling in the prime grade are quality of flesh and the amount of fat it carries. Slight concessions may be made to a lack in general quality and form, but none to a lack in fat. Unless fat, the yearling is unsatisfactory, hence buyers discriminate sharply against those not showing a high finish. See plate 10.

CHOICE YEARLINGS

Since it is difficult to secure the most desirable form, quality, condition, and weight combined in one animal, choice yearlings outnumber those of the prime grade. Any noticeable departure from what is considered prime in any of the above characteristics is sufficient to place a yearling in the choice grade. During the winter season when the offerings of sheep are almost wholly grain fattened the greater number of yearlings are in prime condition, but at all times there are offerings that are not of the most desirable form, quality, and weight. Heavy weight yearlings are most in evidence during the winter season and at the period when yearlings

PLATE II.—CHOICE YEARLINGS.

pass into the wether class. Those of more than 90 pounds weight, although they may be in prime condition, rarely grade better than choice. If yearlings are graded as choice because of their lack in quality it is usually on account of their heavy pelts rather than coarseness of features, or a combination of the two where the deficiency in each is rather slight. There cannot be a great difference between the condition of prime and choice yearlings and, in fact, the total difference between them is not great. See plate 11.

GOOD YEARLINGS

With a few scattered exceptions this is the lowest grade of yearlings offered as mutton. Undesirable quality, weight, or condition or a combination of deficiencies in any two or all three of the above will, if readily apparent, place a yearling in the good grade. Yearlings of 110 pounds and upwards rarely grade better than good, even though they be prime in every other respect. Ill form, general coarseness, and undue weight of pelt are all serious objections and those having such defects are nearly always placed in this grade. A rather frequent combination, placing yearlings in the good grade, is underfinished condition and undesirable quality. If yearlings are assigned to this grade solely because of a want of fat, they are almost on the border line between the mutton and the feeder class and are not much wanted by either packers or feeder buyers. See plate 12.

PLATE 12.—GOOD YEARLINGS. NOTE THE HEAVY PELTS AND THE DEFICIENCY IN CONDITION.

Occasionally either pronounced coarseness, or underfinished condition combined with heavy weight place yearlings in a grade still lower than good, but offerings of this description do not really play the role of yearlings but of wethers, and they usually sell on a par with wethers.

WETHERS

This sub-class is composed of mature castrated males. Since comparatively few native wethers appear upon the market, this class is looked upon as chiefly a western product. It is claimed that there are fewer wethers reaching the markets each year, and if the demand for dressed lamb continues to grow at its present pace, and if transportation lines are extended through all range districts as present indications would lead us to suppose they will be, it is felt that the proportionate number of wethers will continue to decrease. Just now the rangeman has place for wethers if his location is such that the shipment of animals is difficult and expensive; if he has very cheap grazing lands, and can produce his animals at very low cost; or if he has too few breeding sheep to run his ranch at its full capacity. When high prices are ruling for both mutton and wool, wethers will more than pay their way on almost any range, but when the profit they yield is compared with that from breeding ewes rangemen immediately see that the latter

PLATE 13.—A PRIME NATIVE WETHER IN THE FLEECE.

PLATE 14.—THE SAME SHEEP AS IN PLATE 13 OUT OF THE FLEECE.

are more profitable, hence wethers are being discarded by the more progressive sheepmen.

As a mutton product, wethers are desired in hotel, restaurant, dining car, and steamship trade, or in any place where the comparatively heavier cuts may be used to advantage.

The following grades include the offerings appearing on the markets: PRIME, CHOICE, GOOD, COMMON.

PRIME WETHERS

The same conformation, quality, and condition are demanded in prime wethers that have already been noted as characteristic of prime yearlings. The most desirable weights range from 95 to 110 pounds, and are popularly known as light, handy weights. However, wethers weighing 140 pounds and upwards frequently grade as prime if their heavy weight is accompanied by desirable conformation, quality and condition. These prime heavy wethers are selected for export and for a limited demand in a few large cities, notably Chicago, New York and Boston. See plates 13, 14 and 15.

CHOICE WETHERS

Choice wethers must possess quality and condition to a marked degree. Quality in this instance applies more particularly to lightness of pelt and to freedom from paunchiness than to coarseness of features. Wethers of this grade must also come under the light, handy or the heavy weights. Choice wethers are used in the same way as prime wethers, and both are sought by dealers in high class mutton. The choice wether is usually slightly short of prime in form, quality and condition. See plate 16.

GOOD WETHERS

Good wethers are characterized by coarseness and lack of prime condition. They do not command the highest prices because they do not dress a high percentage of marketable meat, nor yield a quality of mutton satisfactory to a high class trade. If wethers are pronounced in their weight of pelt, but covered with thick fat, they will come in this grade unless of undesirable weight. Frequently wethers of choice condition and quality, and weighing 120 to 135 pounds, are placed in the good grade because their weight is not adapted to the purpose for which they are desired. They are too heavy for light, handy purposes, and too light for heavy carcass purposes. See plate 17.

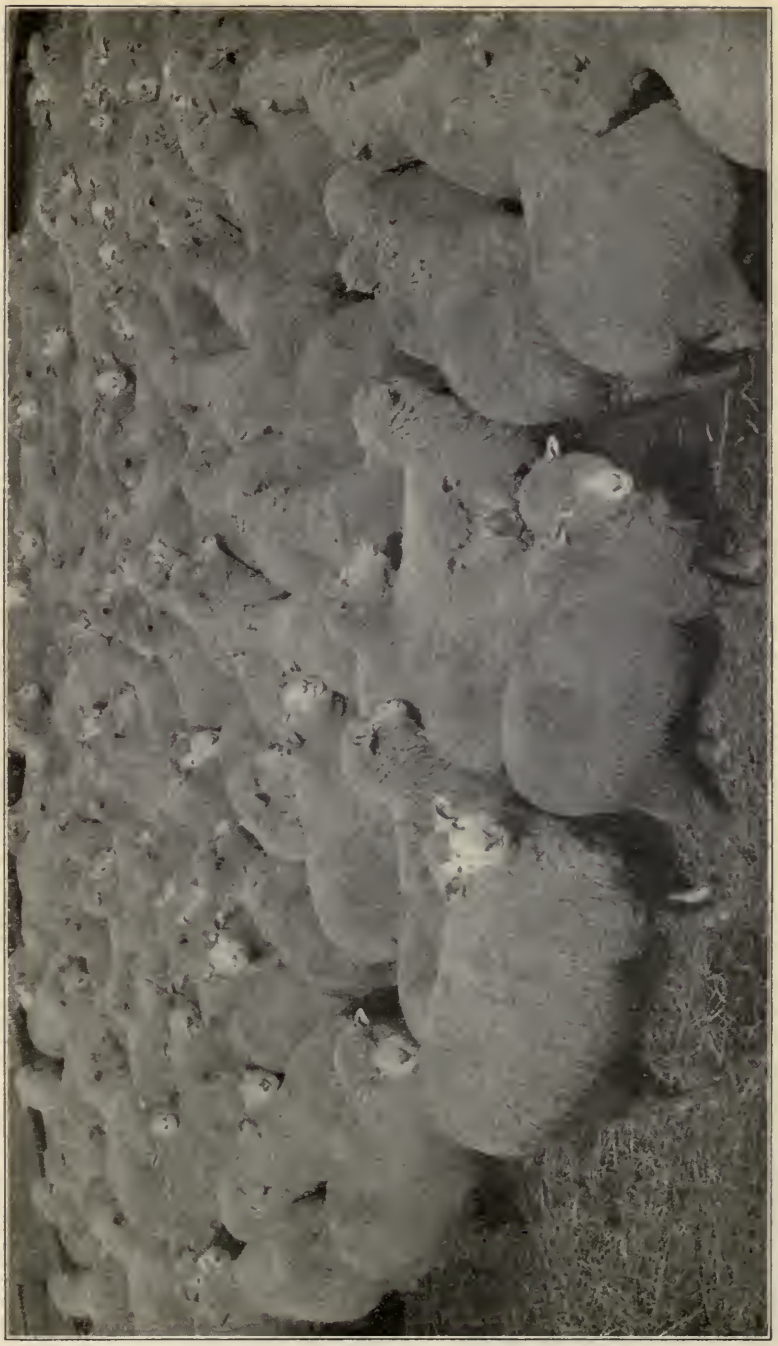

PLATE 15.—PRIME WESTERN WETHERS.

PLATE 16.—CHOICE WETHERS.

PLATE 17.—GOOD WETHERS.

COMMON WETHERS

This grade is made up of wethers of inferior quality and in perceptibly underfinished condition. But for their undesirable quality they would sell as feeders. They help to supply a cheap city trade. See plate 18.

PLATE 18.—COMMON WETHERS.

EWES

This sub-class is composed of yearling ewes, surplus breeding ewes, and those no longer useful for breeding purposes. As these different sources indicate, there are wide differences in the age, condition, and weight of the various offerings of ewes appearing on the market.

Ewes do not sell on a par with wethers because they have, proportionately, a greater percentage of offal and a smaller amount of lean meat. Except in times of urgent demand for mutton, prime wethers sell for at least fifty cents per hundred-weight more than prime ewes. However, when the demand for mature mutton is strong the difference is often no more than twenty-five cents. The higher grades of ewes are used by dealers in high-class mutton for hotel and restaurant trade, but they, of course, are not as desirable as the better grades of wethers. They function somewhat as a supplement to wethers. The lower grades are used in cheap city trade and in districts such as mining camps, where there is a call for cheap mutton.

Ewes are graded as follows: PRIME, CHOICE, GOOD, MEDIUM, COMMON or CULLS.

PRIME EWES

Smooth, highly finished native and western yearling ewes, and a very small number of well-bred, aged native ewes of prime quality and in prime condition, comprise the offerings in this grade. Since the bulk of yearling ewes are sold for breeding purposes the total offerings of prime ewes are small. Prime yearling ewes may be not entirely above criticism in quality and condition, but because they are light in weight, they meet with ready sale. The strongest demand is for weights not greater than 100 pounds. However, large, smooth, aged ewes in prime condition sell as prime ewes. The supply of such ewes is meager and they go to a trade that could not handle many of them. See plate 19.

CHOICE EWES

Ewes of this grade must show development to a high degree in form, quality and condition, as they are placed to the same use as prime ewes. They may be slightly faulty in quality, condition or weight, but they are usually criticised for their lack either of quality or condition. Grain-fattened western ewes frequently sell as choice. See plate 20.

PLATE 19.—PRIME EWES.

PLATE 20.—CHOICE EWES.

GOOD EWES

Good ewes are appreciably open to criticism in condition and often in quality. In most seasons of the year, ewes, choice in condition and quality but of the unhandy weights, ranging from 115 to 130 pounds, are also placed in this grade. See plate 21.

MEDIUM EWES

Underfinished condition and advanced age are usually evident in this grade. Often ewes and their lambs are sent to market together. Ewes in such shipments are frequently too low in condition to be above the medium grade. The mutton from this grade goes to supply a cheap trade. See plate 22.

COMMON OR CULL EWES

Offerings of this grade are pronounced in their lack of condition. Toothless old ewes, too decrepit to make use of feed and thus regain desirable condition, are slaughtered for the cheapest class of trade. As the winter season advances a number of ewes appear on the market well advanced in pregnancy. Such ewes, although they may be of choice quality and condition, sell as common ewes because of their high percentage of waste and the ill effects pregnancy is said to have upon the color of the carcass. General quality cuts little figure in this grade, as the general undesirability passes all offerings through at about the same price. See plate 23.

PLATE 21.—GOOD EWES.

PLATE 22.—MEDIUM EWES.

BUCKS AND STAGS

On the market rams are designated as bucks. Stags are males castrated later than the lamb stage of life and they sell on a par with bucks. Strictly speaking, bucks are not graded although the terms choice, good, and common are frequently used. Quotations

PLATE 23.—COMMON OR CULL EWES.

PLATE 24.—CHOICE BUCKS.

on bucks do not fluctuate daily as do the quotations on the other classes of mutton sheep, but the same quotation runs through a period of days. This practice prevails because of the few sheep offered in this class.

Buck carcasses do not go to any special branch of trade, but they are distributed in with heavy wether carcasses, hence the

more the carcass of the buck resembles that of the wether, the more satisfactorily will it serve its purpose. The smooth buck of tidy form with a light neck, high quality, and thick, firm flesh, sells best. See plate 24.

FEEDER SHEEP

It must be obvious to everyone that the one thing which determines whether a sheep or lamb belongs to the feeder class, is condition. Whenever sheep are too low in condition to suit the needs of the packer they fall into the feeder class, unless they be extremely coarse in quality or weakened in vitality because of disease or advanced age.

The heavy run of feeder sheep occurs in the months of September, October and November, when rangemen are reducing their flocks and preparing for the winter months. However buyers are constantly looking for thrifty, underfinished stuff and a limited number of feeder sheep go out from the markets every week in the year. As the shearing season approaches buyers of feeders from Michigan, Ohio, Indiana and Illinois make strong bids for well wooled lambs. Such lambs usually make large gains immediately after being shorn, and thus are made prime in condition in a short period.

Practically all the sheep sold as feeders are grown on the western ranges. Occasionally a few natives are taken out as feeders but so rarely and in such small numbers that they cannot be listed as belonging to the feeder class. Experience has taught sheep feeders that the thin natives on our large markets are, for reasons already mentioned, rarely profitable in the feed-lot.

The following are the recognized sub-classes of feeder sheep: LAMBS, YEARLINGS, WETHERS, EWES.

FEEDER LAMBS

Feeder lambs are those thin in flesh left after sorting out those in a band in suitable condition for the mutton trade. A great percentage of the feeder lambs reaching the markets fall into that class because of certain influences under which they have been placed. It may be that they have had an unequal chance with those in highest condition in the band on account of not being so well nourished by their dams; they may have been born too late to reach that degree of condition, finish, and weight demanded by the packer; or, they may have been held too long at the shipping place on the range or on the road by poor train service without the necessary amount of feed, so that the deterioration in condition placed what would have been mutton lambs in the feeder class.

The grades recognized on the market are: FANCY SELECTED, CHOICE, GOOD, MEDIUM, COMMON OR INFERIOR.

PLATE 25.—FANCY SELECTED FEEDER LAMBS.

FANCY SELECTED FEEDER LAMBS

Not many of this grade of feeders are to be found on the markets. They are usually the result of long delay at the point of shipment or in transit. Their quality, breeding, and age would place them on the market for mutton direct from the range but for some deteriorating influence that has reduced them in condition. Fancy selected feeders must not only possess the characteristics of choice feeders as noted in the following pages, but in addition they must be uniform in breeding and markings and show an unusual amount of mutton blood for range lambs. Their quality, as evidenced by clear cut features, clean limbs, light and smooth pelts, must be practically above criticism. They are nearly always slightly higher in condition and heavier than the average run of feeder lambs, ranging in weight from 65 to 70 pounds, and in that state of thrift where gains can be placed on them rapidly. If properly handled they are the grade of feeders that will finish quickly into prime lambs. See plate 25.

CHOICE FEEDER LAMBS

Choice feeders will develop into choice and prime mutton lambs if properly managed. Of the grades that come to the notice of buyers generally, they are probably more uniform than any other, and in order to get a fixed standard from which to make comparisons this grade is described in detail.

What the buyer expects of choice feeders is the ability to finish into prime or choice mutton lambs, and to produce gains at

economical figures. The selection of such lambs is based upon form, quality, constitution, condition and weight.

FORM.—In general the form should be deep, broad, well knit, of medium length and low set. This conformation indicates early maturity, good constitution, capacity for growth, and a likelihood of finishing into an attractive carcass with a relatively high percentage of valuable cuts. Very leggy, gaunt, narrow, loosely made lambs usually fatten slowly and lack the ability to make economical gains or to reach choice mutton finish. The choice feeder should be of medium length rather than very long or short. Great length is usually attended with general ungainliness and a tendency to finish slowly. Since lambs of this conformation are usually very long in the coupling, they, when at their best, lack the compactness desired in the choice mutton lamb. On the other hand, the unusually short lamb, as a rule, behaves on feed as though it had been stunted. It is often fastidious in its feeding; it frequently presents a paunchy appearance and has the misfortune to improve but slightly during the feeding period. It has been said that choice feeders should be low set but only a comparatively small number of strong, western lambs have what we would term "short legs." In making selections and keeping the other requisites in mind, the less leggy type should be preferred.

QUALITY.—Quality is a very important consideration in the selection of feeder lambs, and it is that characteristic which is manifested by a medium sized, fine, clean cut head; medium sized, and moderately thin ears; the hair on the face and legs, fine and silky; bone that is fine, and without coarseness at the joints; skin, thin and without folds or wrinkles. A smooth skin without folds or wrinkles and carrying wool of moderate weight is the most important requirement of desirable quality in feeder lambs. Lambs with heavy pelts are discriminated against because they do not, as a rule, gain as rapidly as lambs with smooth skins and they never command top prices when returned to the market fat, because, as was stated in the early pages of this bulletin, the excessive weight of pelt materially reduces the percentage of the dressed weight.

CONSTITUTION.—The conformation which indicates a strong constitution was described above under *form*. A wide, deep chest, fullness in the heart-girth, depth and breadth of body indicate sufficient space for well developed vital organs, or strong constitution. Another important point, which if not a part of constitution is closely akin to it, is thrift. The intelligent buyer of choice feeders rejects all lambs that appear in the least unthrifty, such as lame ones and those inclined to lag behind when the band is moving.

CONDITION.—While it is understood that no grade of feeder lambs is in that condition we would call fat, choice lambs should be fairly full in their outlines and without any suggestion of emaciation. Such condition is of importance for two reasons. First, the exceedingly thin lamb usually does not finish in a normal feeding period and second, a lamb of this description often fails to make gains as economically as those in higher condition.

WEIGHT.—The question of weight should receive consideration. Choice feeder lambs range in weight from 55 to 62 pounds. Lambs weighing less than this are regarded as being either too young or too much retarded in growth to grade as choice. It is expected of choice lambs that they finish into the weights most desirable in a normal feeding period, which is from 90 to 120 days, and hence the initial weight should not be much less than 55 pounds. See plate 26.

PLATE 26.—CHOICE FEEDER LAMBS.

GOOD FEEDER LAMBS

Several things may contribute to make lambs fall into the good grade, such as undesirable condition, weight, conformation and quality. Good lambs are usually more leggy and coarse than those that are considered choice. They often make as good and occasionally better gains than choice lambs, but chiefly on account of their lack in quality they do not reach top prices when they are returned to the market as fat lambs. Lambs weighing between 50 and 55 pounds and choice in form, but somewhat, although not

excessively heavy in pelt, are placed in the good grade. They always meet with ready demand although they do not bring top prices during the heavy run of feeder lambs. They are taken by men who desire to keep their lambs all winter and shear them before marketing. When relieved of their heavy fleeces and finished to a point where they are very fat, they are not seriously criticised for their lack of quality, and they often sell as choice fat lambs. A few weeks before shearing time when feeder buyers are taking unfinished lambs to shear and to feed for a short period, this type outsells any other. See plate 27.

PLATE 27.—GOOD FEEDER LAMBS. LEGGY, COARSE, AND TOO THIN TO BE THE MOST DESIRABLE FEEDERS.

MEDIUM FEEDER LAMBS

Lambs of this grade often have very heavy pelts and hence lack appreciably in quality. Pronounced legginess and angularity of form are frequently noticeable in bands of lambs grading as medium but the chief discrimination is against their quality because of their thick wrinkled skins, and dense heavy fleeces. While in most cases they are thrifty they are usually below the weight most desirable in feeder lambs and this together with their lack of quality and desirable form places them considerably below the choice feeder. See plate 28.

PLATE 28.—MEDIUM FEEDER LAMBS. NOTE THE VERY HEAVY PELTS.

PLATE 29.—COMMON FEEDER LAMBS.

COMMON OR INFERIOR FEEDERS

The lambs most common to this grade are little, light, late born, weak lambs. They are known under several appellations, such as "bums," "culls," "pewees" and "peanuts." Their weight may vary anywhere from 25 to 45 pounds and because of their tender age, light weight and weakened condition they require skillful care and a long period of feeding upon nutritious feeds that will produce a large amount of growth as well as fat. Hence the demand for these lambs is limited because none but men of much experience in lamb feeding and with proper equipment and feeds can successfully handle them. Lambs of the above description are not discriminated against because of their quality, but entirely because of their lack in size, due either to retarded growth or late birth, or perhaps both, and their lack of thriftiness. They frequently sell as prime lambs after being carefully fed for five or six months. The extremely coarse, heavy pelted lambs lacking uniformity both in weight and conformation are also placed in this grade.

The little lambs that form the bulk of the common grade are said to appear in fewer numbers upon the markets each succeeding year, due, perhaps, to improved management of the range flocks, and a realization on the part of the range owners that it does not pay to place them upon the market except under forced circumstances. It would seem, then, that it will not be many years before the common grade of feeders will be confined chiefly to very coarse, thin and unthrifty lambs. See plate 29.

YEARLING FEEDERS

This class is made up exclusively from yearling wethers. As previously stated mutton yearlings are substituted for lamb and if they fail to make a desirable substitute they are not wanted, hence quality and weight are of great importance in this class. In recent years the number of yearling feeders appearing on the markets has been so few that many orders for them could not be filled, and they do not figure prominently in the feeder trade.

The offerings of yearling feeders are graded as follows: CHOICE, GOOD, COMMON.

CHOICE YEARLING FEEDERS

To grade as choice, yearling feeders must be smooth and symmetrical in outline, fairly low set and compact, fine in quality and light in weight. They should weigh 70 pounds or less as the most

PLATE 30.—CHOICE YEARLING FEEDERS.

PLATE 31.—GOOD YEARLING FEEDERS. NOTE THE UNEVENNESS IN SIZE AND THE SLIGHT DEFICIENCY IN QUALITY.

PLATE 32.—COMMON YEARLING FEEDERS. TOO HEAVY AND DEFICIENT IN QUALITY.

desirable weight for grain-fattened yearlings is from 85 to 90 pounds. Choice yearlings are usually in better condition than choice feeder lambs because low condition in yearlings is more objectionable to the packer than the same condition in lambs, and thus yearlings higher in condition than choice feeder lambs are placed on the feeder market. It is one of the objects of the purchaser of yearlings to make a profit by increasing the value per pound of the original weight through the process of finishing. If he succeeds in making the spread between the cost and the selling price per pound sufficiently wide he is not so much concerned about keeping them for a long period to secure a large increase in weight. See plate 30.

GOOD YEARLING FEEDERS

As in the lamb feeder class, so here, unevenness in weight, condition, conformation or quality may cause yearlings to be placed in this grade. It is a lack of uniformity in some one or more particulars more than in anything else that causes yearlings to grade as good. As quality is greatly emphasized in the yearling feeder class anything showing coarseness could not grade as choice and would have to fall into the good or a lower grade. See plate 31.

COMMON YEARLING FEEDERS

Feeders of this grade are deficient in quality and usually heavy in weight. If yearling feeders are heavy in pelt, coarse in bone and weigh 80 to 85 pounds, they will likely sell as sheep when finished and, therefore, the feeder buyer cannot afford to pay as much for yearlings of this description as he can for a lighter, smoother kind. See plate 32.

FEEDER WETHERS

Of the wethers sold from the range for feeding purposes the greater number is shipped direct to western feed lots, hence the supply on the Chicago market is extremely meager.

The grades are as follows: CHOICE, GOOD, MEDIUM, COMMON.

CHOICE FEEDER WETHERS

To be considered choice feeders, wethers must be of good conformation, highly developed in quality and uniform in weight and condition. The extremely thin wether is not particularly sought after because it is mainly a question of price with the purchaser of feeder wethers and if wethers of medium condition can be secured

they are taken more readily than the thinner ones.

The choice feeder wether should be of a light, handy weight, which ranges from 80 to 90 pounds. See plate 33.

GOOD FEEDER WETHERS

Good wethers should be uniform in weight and condition and not open to serious criticism in conformation and quality. As in the choice grade, the extremely thin wether is not sought after. Wethers of this grade are usually inferior to those of the choice grade in quality or condition. See plate 34.

MEDIUM FEEDER WETHERS

Wethers of this grade are usually criticized for their lack of quality and condition. If wethers are in thin condition it is necessary to carry them through a long feeding period and for this reason they are less desirable than if their condition were such that they could be fattened in a short period. More improvement may be made during the feeding period by wethers of this grade than those of any other and when fat they not infrequently grade as choice.

Medium feeder wethers are likely to be large of frame and although not heavy at the time of purchase because of their thin condition, they are heavy wethers when marketed as mutton. See plate 35.

COMMON FEEDER WETHERS

Extremely coarse wethers with heavy pelts, stags, the result of castrating mature rams, and very old wethers, are included in this grade. The offerings in common feeder wethers are small, and what few there are do not sell readily. It is not uncommon to see wethers of this grade held over several days in the pens before meeting with a sale. They are unpromising from the feeder's standpoint because they are likely to make gains slowly and at high cost and when finished their lack in quality places them considerably below the top of the market. See plate 36.

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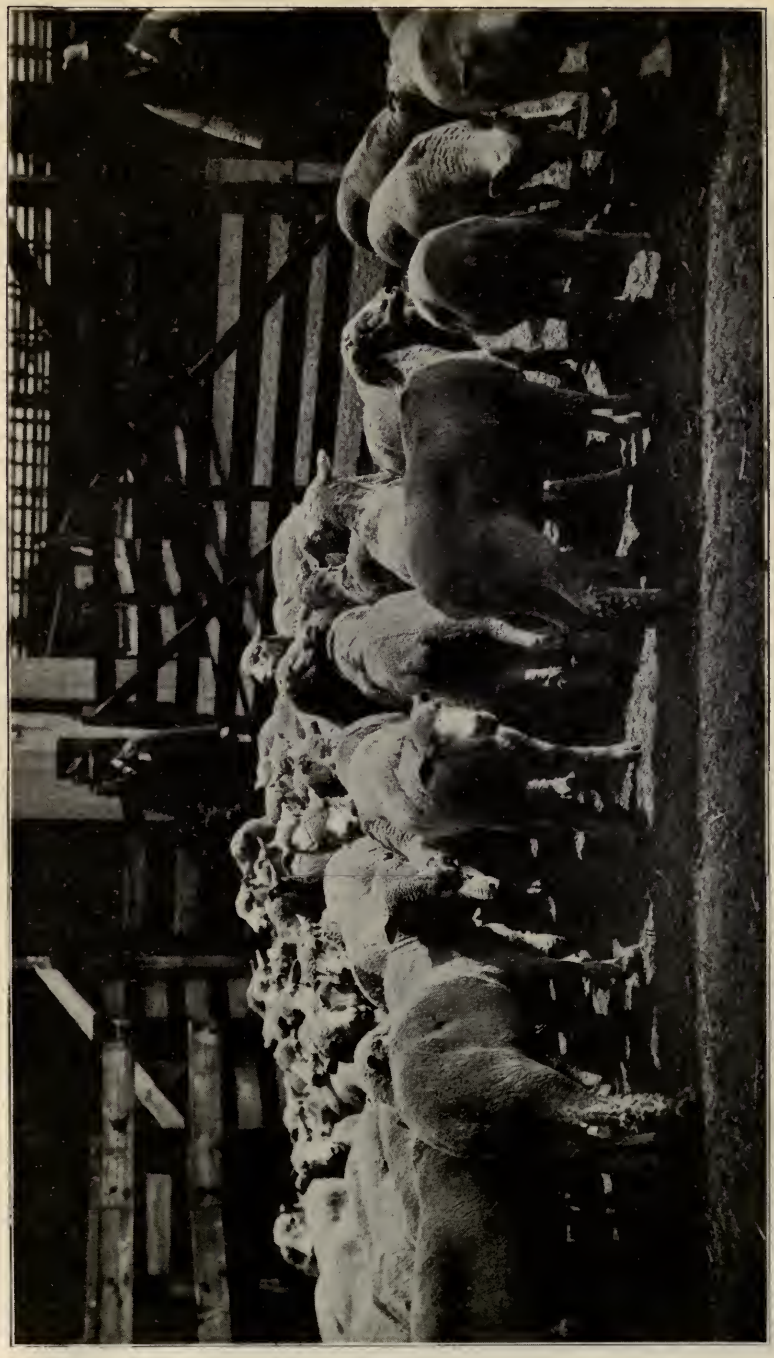

PLATE 33.—CHOICE FEEDER WETHERS.

PLATE 34.—GOOD FEEDER WETHERS.

PLATE 35.—MEDIUM FEEDER WETHERS.

PLATE 36.—COMMON FEEDER WETHERS.

FEEDER EWES

During the past few years the demand for breeding ewes has been so strong that the greater number of western yearling ewes too low in condition to sell as mutton have been shipped out of the Chicago market as breeding ewes. When there is a slow demand for breeding ewes, however, the yearling ewe lops off into the feeder class. Of the mature ewes sold as feeders, the larger number are those that have spent their usefulness as breeders on the range. They vary considerably in condition, quality and general thrift, and all feeder ewes may be graded as follows: CHOICE, GOOD, MEDIUM, COMMON.

CHOICE FEEDER EWES

Most of the yearling ewes offered as feeders are placed in this grade. They are of choice quality and in that degree of condition at which gains are put on rapidly and early give a degree of desirable finish. They weigh from 70 to 80 pounds and when finished yield a neat, handy-weight carcass. Smooth aged ewes of good form and in medium flesh are also placed in this grade. See plate 37.

GOOD FEEDER EWES

To grade as good, feeder ewes must be smooth and healthy, and their teeth must be sound. Owing to sharp demand in the breeding ewe section during several years past many ewes of the above description have gone to the country as breeders, provided

they were good in fleece and sound in their udders. Good feeding ewes are able to utilize almost any sheep feed without special preparation, and also to make good gains during the feeding period. See plate 38.

PLATE 37.—CHOICE FEEDER EWES. THIS PLATE IS ALSO REPRESENTATIVE OF THE BEST TYPE OF WESTERN EWES SELECTED FOR BREEDING PURPOSES.

PLATE 38.—GOOD FEEDER EWES.

PLATE 39.—MEDIUM FEEDER EWES.

PLATE 40.—COMMON FEEDER EWES.

MEDIUM FEEDER EWES

Ewes of this grade may be lacking either in quality or thrift. If unthrifty, they are usually broken mouthed and in low condition. Such ewes are much less desirable than those belonging to the good grade because they are more difficult to start on feed and must receive more careful attention both in preparing the feed and in the method of feeding during the fattening period. See plate 39.

COMMON FEEDER EWES

Common ewes are very old and so depleted in condition that they approach emaciation. As a rule their front teeth are gone or worn so low that they are of little use. Only the best of care and feed will secure gains on ewes of this grade, hence no one except the most skillful feeders having an abundance of choice feed can afford to handle them. Like common wethers, common ewes are few in number on the market. See plate 40.

BREEDING SHEEP

This class includes both native and western ewes in about equal proportions. Breeding bucks are exclusively natives.

The ewes most sought after are two, three and four-year-old, dark faced natives in ordinary field condition. Dark faced ewes sell better than those that are otherwise their equals, because their lambs, being dark faced sell better than light faced lambs on the eastern markets. Western ewes are very popular for breeding purposes in certain localities, as Ohio, Michigan, and western New York, and many engaged in the trade think they should be preferred over natives because they are more hardy and comparatively free from internal parasites. Many of the ewes offered for breeding purposes are yearlings, but they are not as desirable as two or three-year-old ewes because they are immature and likely to be unsatisfactory as mothers at their first lambing. The native yearling is heavier and more nearly mature than the western yearling and she meets with a correspondingly better sale.

The offerings on the market come under the following grades: FANCY SELECTED, CHOICE, GOOD, COMMON.

FANCY SELECTED BREEDING EWES

Only a very few of the breeding ewes sold out of the market can be regarded as Fancy Selected. Occasionally an order is placed for a small number of fancy ewes. These are secured by making

PLATE 41.—FANCY SELECTED BREEDING EWES. Photo by courtesy of American Sheep Breeder.

individual selections from different shipments of native ewes coming to the market, and it may take several days to get together a shipment. Such ewes are high grades of some of the Down breeds, usually Shropshire, and in addition to being thrifty and sound, they are uniform in quality, conformation, fleece and style. Ewes of this grade are, as a rule, in higher condition than any other offerings of breeding ewes because consideration for the requirements demanded makes it necessary to disregard high condition which most purchasers would rather secure through cheap feeding. See plate 41.

CHOICE BREEDING EWES

Since the greater number of the more desirable breeding ewes are in this grade a detailed description is undertaken. The selection of choice ewes is based upon form, constitution, age, soundness, breeding, quality, and condition.

AGE AND SOUNDNESS.—As stated above, the most desirable ages are two, three and four years, and more particularly two and three years. When breeding ewes go to the country it is the thought of the purchaser that they are to produce, on the average, three crops of lambs before they are sent back to the market as old mutton ewes; hence, if the age is any greater than four years the ability to produce profitably for three years is very doubtful.

Soundness refers to the condition of the mouth and udder. A broken mouth, which means missing teeth or teeth worn down short, indicates advanced age and although ewes may otherwise look desirable for breeding purposes they cannot grade as choice if the teeth are not intact. It is necessary that the choice breeding ewe have a sound udder and it is pronounced sound when it is soft and pliable to the touch without abnormal development on either side. Any ewe not having a sound udder should be rejected as a breeder, but in the good and common grades some carelessness is exhibited in this respect.

BREEDING.—The breeding most sought after is some one of the Down breeds, chiefly because of the dark color upon the face and legs. Early in the season of the breeding ewe trade, when Kentucky, Tennessee and Virginia are taking large numbers of breeding ewes, color has a pronounced influence upon the desirability of a ewe. Of two ewes, one with light markings and the other with dark, but equal in all other respects, the one with dark markings is placed a grade higher than the other. It is also desirable that the breeding of choice ewes be such that they have abundant fleeces of medium wool, which means that the wool be of medium fineness and length, dense and evenly covering all parts of the body. Since they are to remain in the country for three seasons the quality and quantity of wool they produce is no inconsiderable item.

CONSTITUTION AND FORM.—The smooth, low set, symmetrical ewe is preferred over the angular, upstanding ewe with uneven top and lower lines. Since the breeding ewe is to produce and nourish lambs it is essential that she be deep and wide in the chest, and that she have a roomy middle, all of which indicates that she has a strong constitution and well developed assimilative powers. Choice ewes, unlike fancy selected, do not necessarily have to be of stylish carriage. From the standpoint of breed type, they are often plain about the head, with rather long necks, and long in the coupling to the extent that they could hardly be regarded as compact.

QUALITY.—Choice breeding ewes should have smooth, rather refined features and bone of medium size. Ewes of this grade are used to produce choice and prime lambs for the spring and early summer markets, and without a great deal of general quality, they could scarcely fulfill their mission. It is well to distinguish between good general quality and over-refinement, as delicate, over-refined ewes are without sufficient constitution to be profitable producers.

CONDITION.—While choice breeding ewes should be thrifty and active, fat is not desirable as the purchaser prefers to place these ewes on pasture and cheap forage feeds, which will secure the condition desired at a lower cost than the price demanded on the market. Breeding ewes are somewhat like feeder lambs in that they are the result of a sort where those ewes of desirable form, quality, breeding, age, soundness, and thrift, but somewhat lower than mutton condition are selected out from those that are fatter and desirable for mutton. See plate 42.

GOOD BREEDING EWES

Several factors combined cause breeding ewes to grade as good, such as undesirable markings, age, weight, conformation and condition. Very often ewes of this grade are shipped from the Chicago market to parties in the country who act as dealers, and these dealers divide the shipment into small lots and sell them to the farmers. In this way small uniform lots may be secured and some of these lots may grade as choice, while others would grade as common, and still others would grade as good. See plate 43.

COMMON BREEDING EWES

The general run of this grade show no single line of breeding. In many instances they are so noticeably advanced in age that it is evident their stay in the country as producers will be short. Perhaps there is no b tter way to define this grade than to say they are on the border line between breeders and feeders, and fortunately they are not sold in any considerable numbers as breeders. See plate 44.

BREEDING BUCKS

While the rams sold out of Chicago market as breeders vary in age, weight, and markings, there are no recognized grades. Those most sought after are dark faced, smooth, low set, vigorous looking rams of a year or more in age. In times of great scarcity ram lambs are taken out for breeding purposes. Inspection of rams selected for breeding out of the open market reveals the fact that the greater percentage show undesirable form and a mixture of breeding. It is deemed unnecessary for the writer to go beyond the province of this bulletin to point out to intelligent breeders the effects of mating grade ewes with sires of the type generally found on the open market. See plate 45.

PLATE 42.—CHOICE BREEDING EWES.

PLATE 43.—GOOD BREEDING EWES.

PLATE 44.—COMMON BREEDING EWES.

PLATE 45.—BREEDING BUCKS.

MISCELLANEOUS

Hot House Lambs (Spring Lambs).—The term "hot house lambs" refers to those produced early and marketed before the general run of spring lambs start to market, which is about May 20. A few shipments of these lambs reach the Chicago market but they are called "spring lambs," not "hot house lambs," and they do not sell as well correspondingly as the same kind of lambs do on the eastern markets. Those who specialize in producing "hot house lambs" usually contract them to be sent in small shipments of dressed carcasses direct to the retailer. This is probably the most advantageous way to market them because they are slaughtered before they are old enough to ship well alive.

PLATE 46.—A HOT HOUSE LAMB.

"Hot house lambs" are most in demand from Christmas until Easter. They must be fat and weigh between 40 and 55 pounds. See plate 46.

Export Sheep.—Most of the sheep selected for export are the heaviest of their class. They are usually in prime condition and of the choice grade. Wethers are preferred, but ewes, yearlings, and lambs are also taken, hence the term "export" cannot be said to apply to any particular sub-class of mutton sheep. Many buyers use the term freely to designate wethers, yearlings, ewes, and lambs heavy in weight and prime in condition whether they be taken for export or not.

THROW-OUTS

This is a term applied to lambs rejected as feeders. After a band of lambs has been divided into the mutton and feeder classes, the purchaser of the feeder end usually has the privilege of rejecting those not suitable for feeding purposes. Lame lambs, those appearing unthrifty, entire males, those large enough to be suspiciously near the short yearling age, and frequently black lambs, make up the rejections. Black lambs are not always rejected, but a number of Ohio and Michigan feeders object to them because they make the band of lambs less uniform in appearance.

Throw-outs sell late when most of the sales for the day have been effected. There are but few of them and these few are not uniform in weight and condition. They are never fat enough to be turned into other than a cheap grade of mutton. All these surrounding circumstances make them the quest of small city butchers who cater to a cheap trade. Throw-outs are often called "rejects," but they are never known as culls or by any of the terms which denominate the grades under the regular classification. Sometimes they sell on a basis of cull lamb prices; at other times, upon that for medium lambs.

DEAD SHEEP

These are sheep that meet with death in transit. Losses are greatest in warm weather when deaths are frequent if close crowding in the car is practiced. Native shippers often experience a loss of sheep in transit by making them part of a mixed load with either swine or cattle. They usually try to guard against such losses by partitioning the sheep off to themselves, but the bumping of the car in switching often breaks down the partition by throwing the animals against it.

Dead sheep have a value chiefly for their wool. The best are worth twenty-five cents per head. It is claimed that fifty percent of them are worthless on account of the wool being mangled and trampled off.

GOATS

Goats are sold for slaughter provided they are in good condition, but they do not sell on a par with sheep. Only a few are sold on the Chicago market, and hence they are not graded. If they are too thin in condition to sell for slaughter, they are sold to go to the country to browse over brush lands. This demand is very uncertain, and offerings for this purpose are frequently held for several days before they can be sold. See plate 47.

PLATE 47.—GOATS.

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